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ABSTRACT

This report is designed to increase understanding of the specific educational needs and accomplishments of the population aged 40 and over involved in postsecondary education and training, providing an array of statistical and descriptive data about older postsecondary students. Data indicate that students over 40 are rapidly increasing as a proportion of the total enrollment in formal higher education, generally attend classes part-time, and express as their greatest need training in their current jobs. Students over 40 have difficulty taking advantage of student services designed to assist them and are less likely to receive financial aid than younger students. Students over 40 generally earn better grades than younger students, but take longer to complete their studies. The report concludes that the demographic wave of students over age 40 could overwhelm the current infrastructure of traditional higher education institutions, especially when combined with the baby boom "echo" of students who will begin enrolling around the year 2000. (Contains 84 references.) (MDM)

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Life After Forty

A New Portrait of Today's -and Tomorrow's- Postsecondary Students

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Life After Forty

A New Portrait of Today's -and Tomorrow's- Postsecondary Students

October 1996

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The Education Resources Institute, Inc. (TERI) was incorporated in June 1985 for the purpose of aiding students in attaining an education and assisting educational institutions in providing an education in an economical fashion. To achieve this purpose, TERI functions as a private guarantor of student loans and engages in a variety of education policy and research activities.

TERI's Higher Education Information Center (HEIC) division receives funds from federal, state and private grants, membership fees from colleges and universities, and other sources. These revenues are used to provide information at no cost to students and their families about financial aid for post-high school education and career opportunities.

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The Institute for Higher Education Policy is a non-profit, non-partisan organization whose mission is to foster access to and quality in postsecondary education. The Institute's activities are designed to promote innovative solutions to the important and complex issues facing higher education. These activities include research and policy analysis, policy formulation, program evaluation, strategic planning and implementation, and seminars and colloquia.

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Foreword

Education for adult students has long been an issue of interest to policymakers and the general public. Older students historically have been seen as a niche within the postsecondary education experience, adding to the diversity of classrooms and institutions. Today, adults are increasingly active and prominent participants in postsecondary education and training, and are having an important effect on its development.

The growth of the so-called "non-traditional" cohort of adult students attending collegiate institutions—those who are 25 years or older, financially independent, often married, and frequently taking courses on a part-time basis—has been well-chronicled in academic and mainstream literature. But much more is happening than simply an expansion of collegiate opportunities for students over the age of 25. This report, one of several that we have released on issues of national significance in postsecondary education and training, paints a new portrait of this changing student population. Students over 40, the fastest growing age cohort in postsecondary education, represent a new set of opportunities and challenges for the nation's system of postsecondary education and training. Where 40-plus students get trained, and how life circumstances affect their educational experience, set these students apart from their younger counterparts.

This report includes an array of statistical and descriptive information about students over the age of 40. We believe the report presents a previously unexplored focus on this important group of students, pulling together a wealth of diverse and sometimes complex information into a single document. Nevertheless, significant limitations in the availability of information about postsecondary education and training by age of the student exist. In particular, the quality of national information about postsecondary training that takes place outside of traditional academic institutions is limited; we hope

that the report will serve as a rallying cry for additional research into this generally unexamined realm.

As the new century approaches, and as the U.S. population continues to age, today's students over 40 may be foreshadowing what the future holds for education and training that occurs after high school. In turn, that education and training could have a profound impact on the nation's overall economic and social well-being. We present this report with the hopes that it will inform the ongoing dialogue about these issues and shed light on a segment of the postsecondary population that is just beginning to emerge as a major influence on campuses and in classrooms.

Ernest T. Freeman
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Executive Summary

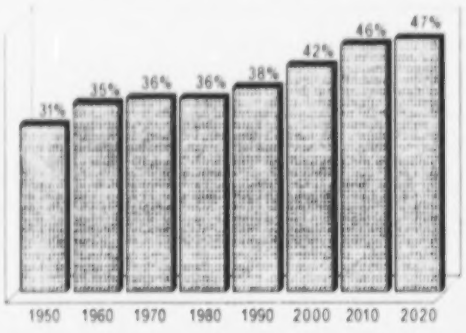
As national economic and employment conditions change because of global competition and rapid advances in technology, who gets postsecondary training, and how they get it, is quickly evolving. One group of students, in particular, appears to be leading this charge: the apex of the "baby boom," who are now reaching the age of 40. While these students historically have been seen as having a narrower avocational or continuing education interest in postsecondary learning, today's students over 40 are promoting change throughout postsecondary education.

Students over the age of 40 are of particular interest because of their unique life and educational circumstances. Although they face some of the same concerns as younger non-traditional students--juggling family, work, and other time commitments--40-plus students also must deal with such issues as expiring job skills and major lifestyle changes. These issues affect not only why students participate in education and training, but also how and where.

The Education Resources Institute (TERI) and The Institute for Higher Education Policy have collaborated to produce this report. The goal of the report is to increase understanding of the specific educational needs and accomplishments of the 40 and older population involved in postsecondary education and training. Such information is important in informing policy makers and higher education administrators about how to better meet the needs of these students. In particular, it is necessary to address the special requirements of students over 40 in the areas of financing and student services.

This report includes the most recent data and information available about the 40-plus student

U.S. Population Over the Age of 40, 1950-2020



Source: *Statistical Abstract of the United States: 1990 and 1995*. U.S. Bureau of the Census. 1990 and 1995

population, with a specific focus on how they gain access to postsecondary education ("getting there"), their experiences while participating in education and training ("being there"), and the outcomes of their educational experiences ("moving on"). These are drawn from a variety of sources including the U.S. Departments of Education, Commerce, and Labor. Other resources include reports and information provided by the American Association of Retired Persons, the American College Testing organization, the American Society for Training and Development, and several postsecondary education providers.

In this report, three "doorways" through which adults enter postsecondary education and training are examined. These are:

- **formal higher education** in programs of study at two- and four-year colleges and universities, graduate and professional schools, and for-profit proprietary schools;

- **employer-provided education and training** for job-skills development that takes place on site, at some other company-approved facility, or is provided by training consultants or community-based organizations; and

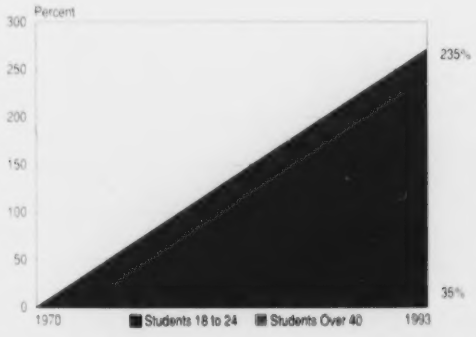
- **innovations** through which education and training is accessed and provided through the use of information technology and distance learning, and other cutting-edge methods.

The major findings of this study include:

Students over 40 are rapidly increasing as a proportion of the total enrollment in formal higher education. Between 1970 and 1993, the enrollment of students 40 and older in all sectors of higher education grew by 235%, from an estimated 477,000 to over 1.6 million. The percentage of 40-plus students

increased from 5.5% of total higher education enrollment in 1970 to 11.2% in 1993, the largest jump of any age cohort. In contrast, students age 18 to 24 have dropped from 69.1% of total enrollment in 1970 to 54.9% in 1993. Students 40 and older are currently 10% of all undergraduates, 22% of all graduate students, and 6% of all professional students.

Change in Enrollment in Higher Education by Age, 1970-1993



Source: *Digest of Education Statistics, 1995*, National Center for Education Statistics, U.S. Department of Education, 1995, and IPEDS, 1993, National Center for Education Statistics, U.S. Department of Education

Most students over 40 attend classes on a part-time basis. Seventy-nine percent of students over 40 are part-time students. Over half of these part-time students are enrolled at two-year public institutions, and 83% total are enrolled in the public sector. For 18 to 24 year olds, the proportions are nearly the opposite: 77% attend full-time.

The typical 40-plus student is white, female, and married. For undergraduates, 82% are white, non-Hispanic, 66% are female, and 59% are married. By comparison, for traditional 18 to 24 year olds, 76% are white, 52% are female, and 8% are married.

Increasing educational requirements for employment, changing life circumstances, and personal growth are primary factors motivating the entrance or return to postsecondary education by adults over 40. An institutional survey created by the American College Testing organization shows that 49% of students over 40 say "to become better educated" is a major factor in their decision to pursue postsecondary education, while 47% indicate that "personal happiness" is their primary motivation. In addition, 33% cite "to improve my income" and "to meet job requirements or improve job skills" as influential in their decision.

Surveys of workers reveal that those over 40 have the greatest need for training in their current jobs. A U.S. Department of Labor study found that workers over the age of 45 who reported needing training to get their current jobs grew by 21% in nearly a decade, compared to only 6% growth for younger workers. In addition, higher percentages of older workers take skill improvement courses in their current jobs: from 1983 to 1991, those 45 and older taking these courses grew by 45%, while younger workers increased their participation in skill training by only 16%.

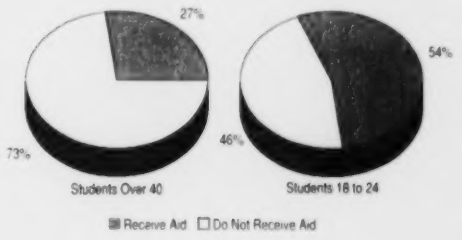
Students over 40 are key factors driving innovative approaches to postsecondary education and training. New methods of teaching and learning, spurred on by technology and economic competition, are resulting in the record numbers of students over 40 enrolling in postsecondary education. For example, the Education Network of Maine (ENM) provides access to courses, degree programs, training, and teleconferences through a statewide network of voice, video, and data systems. In 1994, 28% of students participating in ENM's Interactive Television System were 40 and older.

Despite their growing prominence in postsecondary education, the student aid system does not adequately address the needs of students over 40. Only 27% of undergraduate students over the age of 40 receive some form of financial aid. Within the 40 and older population, only 17% receive federal assistance. By comparison, 46% of all 18 to 24 year old undergraduates are awarded some form of financial aid, with 36% receiving federal student aid. The average total aid award for undergraduate students over the age of 40 is 40% lower than the average aid package that students 18 to 24 receive.

Students over 40 must contend with a range of complex issues that can impact their ability to pursue or succeed

in postsecondary education. One of the most important issues that students over 40 must contend with is juggling work and academics. According to the U.S. Department of Education, 57% of undergraduate students over 40 work at least 30 hours per week, compared to only 25% of students age 18 to 24. Further, the typical undergraduate student over the age of 40 works an average of 38 hours per week, or nearly full-time. Of 18 to 24 year olds who work, the average per week is 26 hours.

Who Receives Undergraduate Financial Aid



Source: NPSAS: 1993, Data Analysis System, National Center for Education Statistics, U.S. Department of Education

Many students over the age of 40 have difficulty taking advantage of student services designed to assist them. A 1994 study found that 45% of students over 40 never talked with a faculty member about academics, 74% never attended career related lectures, and 93% never attended a student assistance center. A major reason why students over 40 do not take advantage of the available services is lack of time, due to family, career, and other responsibilities. Further, research indicates that many institutions have not yet mastered the process of making such services readily accessible to adult students. For example, faculty members often have office hours during the normal work day--when many 40-plus students are unavailable.

Students over 40 generally have better grades than younger students, but take longer to complete their studies. Forty-four percent of students 40 and older received "mostly A's" in their coursework, compared to only 9% of students 18 to 24. Yet U.S. Census data indicate that the competing demands for time placed on students over 40 have a negative effect on the ability to complete their postsecondary studies. Among 18 to 24 year olds with degrees, 64% complete their bachelor's degree in four years or less, 90% complete in

five years or less, and 99% complete in six years or less. In comparison, only 39% of 45 to 54 year olds complete in four years, 58% complete in five years, and 67% complete in six years.

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The findings of this report suggest that the long-term impacts students over 40 might have on the system of postsecondary education and training--and on American society--are only now beginning to appear. With the new century approaching, students over 40 could have several significant effects:

The demographic "wave" of students over 40 could overwhelm the current infrastructure of traditional higher education institutions, especially when combined with the baby boom "echo" of students who will begin enrolling around the year 2000.
Little attention has been focused on the impact of the echo generation and their parents simultaneously participating in postsecondary education. The over 40 cohort could place extraordinary demands on colleges and universities, generating an even greater need to increase faculty and staff, build new and different facilities, and enhance student services.

Barriers to participating in postsecondary education will be reduced as employers play a larger role in the education and training of all Americans.
Unlike the generation of workers that came before them, the over 40 population has gained greater access to training through their workplaces and other providers. Since the 1970s, the number of corporate universities has grown from 400 to over 1,000. As a result, the historical concentration of postsecondary education and training in traditional colleges and universities will likely continue to be augmented by new providers of postsecondary education and training.

Students over 40 will help to transform how postsecondary education is delivered.
Despite the over 40 generation's lower comfort level with technology and computers, they have been major consumers of new teaching and learning tools. Students over 40, who generally do not enroll in residential programs or attend a traditional college or university on a full-time basis, are at the forefront of this trend.

Students over 40 will have a major impact on how postsecondary education is financed.
As students over 40 grow as a proportion of the postsecondary population, their specific needs and circumstances will affect the entire financing system. Institutions will be compelled to adjust how they allocate resources for student services, and also will need to take the part-time, irregular attendance patterns of 40-plus students into account when awarding student aid. Furthermore, students over 40 will have to modify their own spending habits, particularly since many will face the prospect of simultaneously footing the bill for their children's education.

Americans over the age of 40 will be critical to the economic productivity of the nation and its competitiveness on a global scale.
Numerous studies on worker productivity have pointed out that the greatest contributions workers make to the U.S. economy and to their specific field of employment occur after the age of 40. Since this population is the largest age cohort in history, it is likely to have the greatest economic and social impact on the nation.

Lifelong learning will increasingly become a reality for Americans.
As the need to upgrade skills continuously becomes a requirement for employers and employees, the notion of

lifelong learning will become commonplace. This will significantly affect how people think about and approach work, including decisions concerning career changes, retirement, and a host of other issues.

The increased participation of Americans over the age of 40 in postsecondary education and training will contribute to the nation's social stability and well-being. The benefits citizens age 40 and older reap as individuals from postsecondary education and training will pay off for society as a whole. Research has shown that persons who have attended postsecondary education earn higher wages, have lower rates of unemployment and welfare participation, perform more community service, vote at higher rates than others, and contribute more to the nation's tax base.

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Students over 40 are now beginning to emerge as a major influence on postsecondary education and training. Though still proportionally smaller than other age groups on campuses and in classrooms, the rapid growth of this group has placed it at the forefront of change and progress. The current experiences of students over 40 provide a vision for the future of education and training for all citizens, and in so doing offer a window to the future of our nations's prosperity.

Chapter One
Introduction

1

In 1956, over 4.2 million babies were born in the United States. Today, these children, the apex of the "baby boom" generation of 77 million Americans born between 1946 and 1964, have now reached the age of 40.[1] By the standards of modern society, this is an age of special significance. Viewed as a mid-point in people's lives, the passage to age 40 often compels a significant reexamination of life goals and expectations. Children are growing up, career paths are evolving, and relationships with one's own parents are beginning to change. Decisions that are made during this time period often alter the course of the individual's life. One of the most common outcomes of this time of reflection is an entrance--or return--to postsecondary education and training.

Currently, adults 40 and older represent 40% of the nation's populace, an increase from 1950, when they were 31% of the country's citizens.[2] Thanks to medical advances, improved nutrition, and jobs that are less physically demanding than in the past, the length of the average American's life has grown and general health has increased. These factors are placing those 40 and older in a position of growing importance in public policy and the nation's economic competitiveness. This status increases the need for adults over 40 to participate in the ever-expanding forms of postsecondary education.

Undergraduate students 40 and older are part of the rapidly increasing "non-traditional" student population in higher education. Students over the age of 40 are of particular interest because of their unique life and educational circumstances. Although they face some of the same concerns as younger non-traditional students--juggling family, work, and other time commitments--students over 40 also must deal with such issues as expiring job skills and major lifestyle changes. These issues affect not only why students participate in education and training, but also how and where.

Purpose of This Report

A great deal of research has been conducted on the general non-traditional student population, but little has specifically examined why adults 40 and older pursue postsecondary education and training, or the unique issues they face when they do so. As a result, The Education Resources Institute (TERI) and The Institute for Higher Education Policy have collaborated to produce this report. The goal of the report is to increase understanding of the specific educational needs and accomplishments of the 40 and older population involved in postsecondary education and training. Such information is important in informing policymakers and higher education administrators about how to better meet the needs of these students. In particular, it is necessary to address the special requirements of students over 40 in the areas of financing and student services.

This report includes the most recent data and information available about the 40-plus student population. These are drawn from a variety of data sources. The U.S. Department of Education's most recent National Postsecondary Student Aid Survey (NPSAS) provides the majority of information about students in formal postsecondary education. Data are also drawn from the Department's Beginning Postsecondary Students (BPS) survey, from the comprehensive Integrated Postsecondary Education Data System (IPEDS), and from the National Household Education Survey (NHES). Data and information on workforce education and training programs are provided by the U.S. Departments of Commerce and Labor. Other resources include reports and information provided by the American Association of Retired Persons, the American College Testing (ACT) organization's Adult Learner Needs Assessment Survey, the American Society for Training and Development, and several postsecondary education providers.

The Employment and Economic Context

The over 40 segment of today's society holds a much different position than previous generations at this age. Beyond new types of jobs to be found in the current workplace, attitudes about working and education and training have changed.

The push towards postsecondary education for economic and personal fulfillment was not nearly as strong when Americans 40 and older were coming into adulthood. But today, the concepts of aging and working toward retirement have changed. Older Americans have witnessed a resurgence in the workforce. Surveys of older citizens, particularly those nearing retirement, indicate a desire to continue working beyond the age of 65, and to remain active in the workforce even in retirement.[3] Advanced technology and medicine, and improved living and working conditions have produced greater longevity: research has shown that adults are capable of leading productive work lives well into their 80s. Many workers have pursued different types of jobs at the end of their normal working lives; from what had been their career they have moved into "bridge" jobs that carry them from their active full-time working life to their life of retirement.[4]

Some businesses have found that utilizing people returning to the workforce makes good economic sense. Research indicates that older workers have higher rates of training completion, stay on the job longer, are frequently more successful in their jobs, have lower job turnover and absenteeism, and are more willing to work overtime. Even in organizations where older workers have been supplanted by younger workers through downsizing, many have sought out older workers to fill in as part-time employees or consultants.[5]

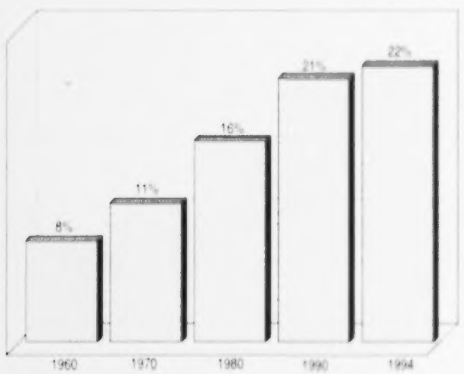
But in order for these efforts to be successful, older workers need more education and training, both in their current positions

and as they re-enter the workforce. Most notable is the need for new skills in those fields which have been created or have grown considerably during the over 40 worker's employment experience. Historically, higher levels of education and training were not required since the job market did not demand such advanced skills. Furthermore, the generation that preceded today's 40-plus group was only modestly involved in higher education; they lacked any postsecondary experience upon which their children could model their own educational careers. In fact, among today's undergraduates who are 40 and older, two-thirds have parents whose highest educational attainment was a high school diploma or less.[6]

Educational Attainment

In 1980--six years after today's 40 year olds graduated from high school--just 16% of adults 25 and older had completed four years of college or more. This was an increase from 1970, when only 11% of adult Americans had completed four years of college or more. Going back another 10 years to 1960, less than 8% of adults 25 and older had completed that amount of postsecondary education.[7]

Adults 25 Years and Older Who Have Completed 4 Years of College or More, 1960-1994



Source: *Statistical Abstract of the United States*, 1995. U.S. Bureau of the Census, 1995

Among those 50 and older who are currently employed, the historical trend is one of limited involvement in postsecondary education. According to a survey by the American Association of Retired Persons (AARP), 35% of today's full-time workers 50 and older cite a high school diploma as their highest educational attainment, while 14% say that they stopped their academic career in grade school or before graduating from high school. Twenty-one percent have had some college education, but only 15% are college graduates. In addition,

13% have attended postgraduate programs of study.[5]

While Americans' average educational attainment has increased each decade this century, there are still many adults over 40 who did not pursue or complete formal higher education when younger and who are now doing so through continuing education classes, undergraduate degree programs, and graduate courses of study. These students are joined by many others their age who are pursuing postsecondary education and training in the workplace or through private or governmental programs.

Motivations for Participating in Postsecondary Education

For most adults over 40, the reasons for seeking postsecondary education are linked to several factors, including career enhancement, job displacement, divorce (especially for women), and personal growth. In turn, the reasons for pursuing some form of postsecondary education have an effect on where these students go, the classes they take, how they participate, how they finance their educations, their needs while enrolled, and the results of their endeavors.

A significant amount of information exists on why older students participate in postsecondary education and training. However, much of it is anecdotal or based on small focus groups or interviews. Few large national data sources exist that chronicle what inspires adults over the age of 40 to enter or re-enter education and training. The limited national sources which do exist tend to focus on students who access instruction at traditional educational institutions, such as community colleges, universities, and proprietary schools.

Several common motivations are cited in the general research on adult students. Increasing educational requirements for jobs,

particularly for higher paying jobs, is thought to be "the single most powerful factor."[9] Other significant catalysts include: family life transitions, such as marriage, divorce or death; changes in leisure patterns, such as more free time once children are in school or reduced work-loads; and personal growth and self-fulfillment.[10]

Women seem to have specific motivations for participating in postsecondary education. For example, they frequently cite fewer time demands--seeing their children grow up--and reduced workload or unemployment as reasons for beginning or continuing education and training. Recent research on older women participating in education cites the following primary motivations: self-improvement, self-actualization, vocational, family, and knowledge. Women of the baby boom generation, having grown up with the idea that they can use education to improve their personal lives and careers, are more likely than men to use education and career training as they change jobs or enter the workforce from family responsibilities.[11]

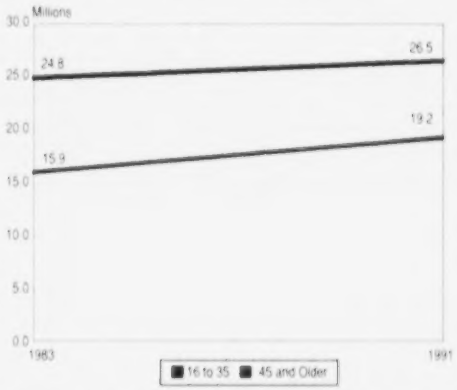
The American College Testing (ACT) organization produces an institution-administered survey of adult learners to assess their needs. Among the questions posed to respondents is whether certain factors were major, minor, or not reasons for continuing their education. Students over 40 cited several factors as major reasons, including:

- "To become better educated and informed": 49.2%;
- "For personal happiness or satisfaction": 47.0%;
- "To obtain a higher degree": 42.9%;
- "For general self-improvement": 40.2%;
- "To improve my income": 33.1%;

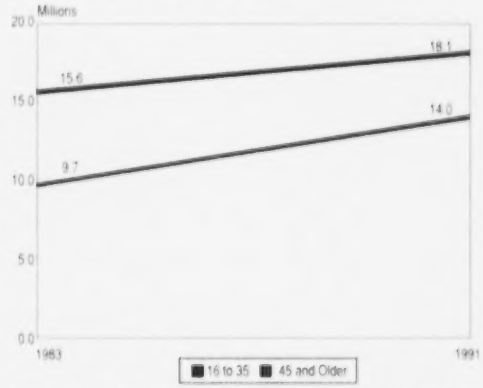
- "To meet job requirements or improve job skills": 33.0%;
- "To learn a new occupation": 24.8%; and
- "To obtain or maintain a certificate": 18.2%.[12]

An important motivating factor among people over the age of 40 is an increased need to participate in training in order to qualify for a job. A study by the U.S. Department of Labor found that among older workers, those age 45 and older who reported needing training in order to qualify for their current jobs grew from 15,922,000 in 1983 to 19,236,000 in 1991, a 21% increase. Over the same time period, the need for training among workers age 16 to 35 increased only 7%. In addition, larger percentages of workers age 45 and older took skill improvement training while in their current jobs: from 1983 to 1991, the number of workers 45 and older taking skill improvement courses grew by 45% from 9,707,000 to 14,038,000. Younger workers age 16 to 35 increased their participation in skill training by only 16% over the same period.[13]

Workers Needing Training to Qualify for Their Current Job by Age, 1983 and 1991



Workers Participating in Skill Improvement on Their Current Job by Age, 1983 and 1991



Source: *How Workers Get Their Training: A 1991 Update*, Bureau of Labor Statistics, U.S. Department of Labor, 1992

Further, a study by the National Research Council (NRC) shows an increased need for workers to reeducate themselves at their "occupational half-life." In the workforce, one half of workers' skills quickly become obsolete. In fact, according to the NRC, the span of time it takes for one-half of workers' skills to become obsolete--the occupational half-life--has declined from 7-14 years to 3-5 years.[14]

Three Doorways to Postsecondary Education and Training

In this report, three "doorways" through which adults enter postsecondary education and training are examined. Based on the definition of where students take classes or receive training, these doors are identified as:

- **formal higher education** in programs of study at two- and four-year colleges and universities, graduate and professional schools, and for-profit proprietary schools;

- **employer-provided education and training** for job-skills development that takes place on site, at some other company-approved facility, or is provided by training consultants or community-based organizations; and

- **innovations** through which education and training is accessed and provided through the use of information technology and distance learning, and other cutting-edge methods.

Formal Higher Education

Many members of the over 40 student cohort need educational options that are flexible enough to fit around work schedules and family commitments, and are available close to home. Education will continue to play an important role in preparing older workers for changing roles in the workforce as they need to upgrade skills continuously to remain competitive in current positions, and in some cases take on new ones.

Community colleges provide many of the aforementioned qualities that older students seek. As a result, these institutions enroll the majority of students 40 and older. Tuition at these two-year public institutions, which is generally lower than at other

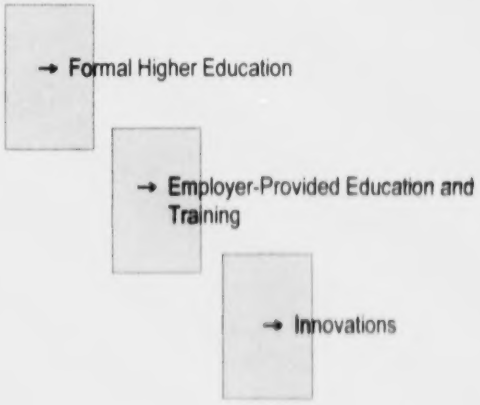
types of institutions, is also attractive to older students who may have significant financial responsibilities beyond their personal education costs.

Four-year undergraduate institutions offer options for older students ultimately seeking a bachelor's degree, but many students over 40 attend classes for an extended period of time without completing a degree. The more traditional offering of courses and fields of study at four-year colleges compared with two-year colleges and proprietary institutions appeal to those students returning to complete a degree started earlier in life.

Graduate and professional programs are often better geared towards older students than undergraduate programs. Courses are frequently offered at night to accommodate working students. The part-time, older student is a common participant in many graduate and some professional programs. In the post-baccalaureate world, curricula and programs are designed with mature students in mind: either serious young students coming directly from finishing their undergraduate degree, or older students returning for an advanced education. The reasons why students over 40 seek out an advanced degree are in many ways analogous to the reasons why students enter or return to any kind of education or training. They want to learn more, need the advanced education to further their careers, or are seeking new skills to make them more marketable.

Proprietary institutions provide opportunities for adult students seeking specific job skills development. Many proprietary institutions have greater flexibility in their curricula and can offer programs targeted specifically to meeting local labor force needs.

Three "Doorways" to Postsecondary Education and Training For Adults

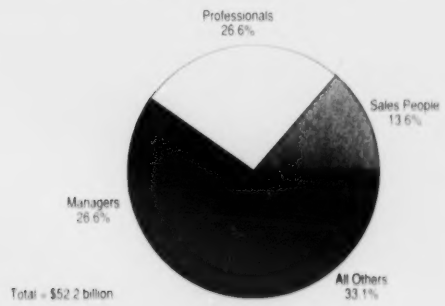


Employer-Provided Education and Training

In order to generate more competent and productive employees and gain a competitive edge, numerous businesses offer their own programs that enhance the technical and managerial skill development of their workers. Since employers can benefit from the continuity and "institutional memory" of long-time, older workers, they are learning that providing education and training to all age groups is a wise investment. In 1995, $52.2 billion was spent on training by employers. Employers most frequently provide training in new employee orientation, performance appraisals, computer applications, and leadership.[15]

According to recent reports, a growing trend in older student participation in education and training is that members of the baby boom generation are foregoing formal higher education and are instead looking to the workplace to continue their learning. This is because education provided by employers is often cited as more work-related.[16] Some corporate entities have even created their own "colleges" to train employees. While Motorola University and Xerox's Document University have enjoyed storied reputations as innovators in the field of corporate education, many new corporate colleges have followed their lead. From Aetna, to American Express, to General Electric, businesses large and small have increased their commitment to the education of their employees.

Corporate Expenditures on Employee Training by Occupational Category, 1995



Source: "Industry Report 1995: Employee Training in America," *Training*, October 1995

In addition, over the past decade many corporations have begun to incorporate training and education directly into their daily operations. In 1995, 49.6 million workers received formal training. The total hours of

training provided by employers in 1995 was 1.59 billion, an increase of 10% from 1994.[17] These numbers are projected to increase, given that the baby boom generation is now in its most productive years and will continue to need additional training to either stay competitive in their current jobs or get new ones.

In *The Monster Under the Bed*, a book about the necessity of employee education and training, authors Stan Davis and Jim Botkin cite four critical aspects of the current approach to employer education:

- It is the fastest growing learning segment in our society;
- It focuses on learning for managers and professionals, productivity for service workers, and basic schooling for unskilled workers, in that particular order;
- It is more revolutionary than education provided by business schools; and
- Its growth foreshadows changes in other education markets.[18]

Innovations

All forms of education and training are being affected by technological advances. For older students, new educational avenues pose greater opportunities for increased access to skill development. In formal higher education, students once isolated by geography, disability, or scheduling are now able to "attend" classes miles away from campus via interactive television, personal computers, and other means. In 1995, 42% of students utilizing distance education technology resided more than 25 miles from campus or lived in another state.[19]

Students using such approaches to gain access to a postsecondary education can learn at their own pace by attending school year-round and taking classes early in the morning or late in the evening and on the weekends. The length of a technologically-transmitted course may span a few weeks to a year.

Businesses are also using technology to deliver courses in-house to their employees or even to their clients for whom they provide training. Distance learning allows employers greater flexibility in providing training at numerous sites, increasing their reach without significantly raising their costs.

Chapter Two
Getting There

The process of actually getting into and enrolling in a postsecondary program is a different experience for students over 40 than for their traditional age classmates. Once adults 40 and older have made a decision about what types of education to pursue and from what sources, several important events occur. This chapter focuses specifically on how students over 40 are recruited and admitted to postsecondary education, their enrollment patterns, and how they pay for their education and training.

Recruitment and Admissions

The way students over 40 become involved in postsecondary education depends largely upon which of the three doorways—formal higher education, employer-provided, or innovations—they choose in accessing education and training. In each case, however, the processes are being adapted to fit the specific needs and interests of these adults.

One of the greatest barriers to recruiting students over 40 is finding ways to get information about postsecondary education and training to them. Prospective adult learners are not centrally congregated in high schools and their needs and interests are less homogeneous than 18 year olds. Many postsecondary institutions have already adjusted their means of recruitment to be more attuned to adult student needs. The growth in the 1980s of the younger non-traditional student cohort (age 25 to 39) prompted some institutions to revamp their recruitment methods.

Institutions have discovered that they must be more creative and less conventional in their outreach efforts, including finding ways to distribute course information at locations frequented by adults. These range from work sites, to public libraries, to shopping malls, to churches. For example, the City University of New York conducts outreach in public housing facilities and

through the state's Department of Labor to find prospective adult students.[20] Some institutions have taken more subtle steps, such as redesigning marketing and promotional materials to feature photos of older as well as younger students, and hiring staff members familiar with adult learners' needs to work in recruitment offices and information booths.[21]

For employers, recruiting workers into education and training programs often requires them first to identify organizational needs. Some jobs require more instruction than others, and companies have to keep the short- and long-term needs of their organization in mind when making these decisions. Traditionally, employer-provided training has been "offered" to full-time workers who hold professional, executive, or technical positions. But as the demographics of the nation and workforce change with a larger presence of older and minority workers, so too, will these characteristics change. Employers will have to identify those workers in need of training early on in their careers, particularly if Americans are going to remain in the workforce longer.

In addition to changes in recruitment methods, the increase in adults seeking higher education has necessitated certain adaptations in the college admissions process. According to The College Board, 35% of postsecondary institutions have admissions counselors for adults, and an equal percentage offer pre-enrollment advisement or counseling for adults.[22]

Only 30% of colleges and universities have special admissions policies or waiver requirements for older students.[23] At community colleges, which generally operate with an "open door" policy, adult students do not face many obstacles in the admissions process. At some selective four-year colleges and universities, however, the process is still geared towards the traditional student population and typically evaluates student applicants on the basis of their high school performance and

standardized test scores. Such information is not as relevant for adult students who left high school long ago and may have capabilities today that are very different from those of their younger years.

Many institutions are adopting admissions criteria for older applicants that stress experience and skills learned in prior academic training. The growth in the use of portfolios--presentations of work-related skills and achievements as demonstrated through work products and affidavits--in the admissions process allows older students to make a case for their skills, in lieu of test scores and transcripts. In addition, a growing number of schools are awarding credits for non-traditional or life experiences that help older students meet necessary admissions requirements or bypass introductory level classes and beyond.

For example, the University of Maryland's University College (UMUC), an innovator in the field of adult education, does not require standardized test scores for admission. In 1996, over 500 students enrolled through their Excel program, which allows students to acquire up to 33 credits for prior learning experience. Through a rigorous process, applicants must document that what they have learned is worthy of college credit and present their case to a faculty review panel.[24]

Enrollment in Education and Training

Increased numbers of adults over 40 are participating in education and training: the 1994-95 National Household Education Survey reports that 76 million adults, 40%, now participate in one or more education activities, an increase from the 32% participation rate reported in the 1991 survey.[25] Enrollment data for adults over 40 in education and training programs are most readily available for those students in formal higher education.

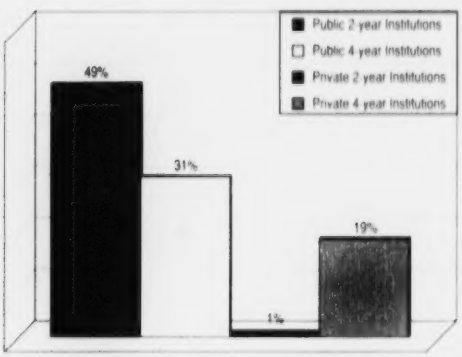
Formal Higher Education

Although proportionally smaller than the 18 to 24 year old higher education population, adults 40 and older in formal higher education are steadily increasing in number. Between 1970 and 1993, the fall enrollment of students 40 and older in all sectors of higher education grew by 235%, from an estimated 477,000 to over 1.6 million. Over that same time period, the 18 to 24 student population grew from 5,937,000 to 7,967,000, an increase of only 35%. The percentage of 40-plus students grew from 5.5% of total higher education enrollment in 1970 to 11.2% in 1993, while the percentage of 18 to 24 year olds dropped from 69.1% to 54.9% of total enrollment. Students 40 and older are currently 10% of all undergraduates, 22% of all graduate students, and 6% of all professional students, while students 18 to 24 comprise 60% of all undergraduates, 16% of all graduate students, and 39% of all professional students.[26]

The breakdown of the 1,618,086 students over 40 enrolled at all higher education institutions in the fall of 1993 was as follows:

- 31% (499,968) attended four-year public institutions;
- 49% (792,904) attended two-year public institutions;
- 19% (307,519) attended four-year private institutions; and
- 1% (17,695) attended two-year private institutions.[27]

Where Students Over 40 Go To School

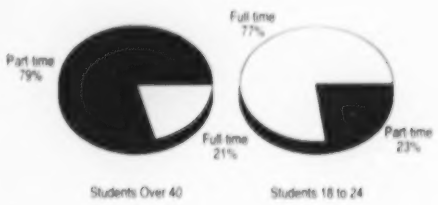


Source: IPEDS, 1993, National Center for Education Statistics, U.S. Department of Education

The typical student over the age of 40 attends classes on a part-time basis, due to work and family commitments. In 1993, 79% of students

over 40 were part-time students and only 21% were full-time students. Over half of all part-time students were enrolled at two-year public institutions, with a combined 83% enrolled in two- and four-year public schools. Full-time students also enrolled in larger numbers in public institutions, 70%, compared to 30% at private two- and four-year institutions.[28] Public institutions are attractive to students over 40 because of their proximity to home and work, and their lower costs of attendance.

Attendance Status by Age, 1993



Source: IPEDS, 1993, National Center for Education Statistics, U.S. Department of Education

In comparison, 18 to 24 year old students overwhelmingly attended full-time--77%--while only 23% attended part-time. An even larger percentage of part-time students in the 18 to 24 cohort were enrolled in two- and four-year public institutions, 91%, than among the older students. While almost three-fourths of full-time students from this age group attended public institutions--52% and 21% at four- and two-year institutions, respectively--larger numbers of 18 to 24 year old full-time students attended private institutions--25% at four-year institutions and 2% at two-year institutions.[29]

Undergraduate Students

More than 1.2 million adults age 40 and older participate in undergraduate education.[30] The majority of these students are female, 66%, compared to 34% male. Of those undergraduates 40 and older, 82% are white, 9% are black, 6% are Hispanic, 2% are Asian/Pacific Islander, and 1% are American Indian/Alaskan Native. In addition, more students over 40 are married, 59%, versus 41% who are not.

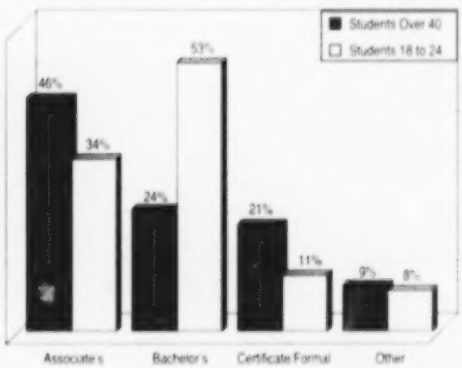
For traditional undergraduate students 18 to 24, 52% are female and 48% are male. Seventy-six percent are white, 10%

are black, 8% are Hispanic, 5% are Asian/Pacific Islander, and 1% are American Indian/Alaskan Native.[31]

Fall enrollment figures for undergraduates over the age of 40 pursuing a degree show that 59% attend public two-year institutions and another 24% enroll at public four-year institutions. In the private sector, 15% attend four-year institutions, while only 2% of degree-seeking undergraduates age 40 and older attend two-year institutions. Among students 40 and older, 74% attend part-time, particularly those enrolled at two-year public schools. The 26% of full-time students 40 and over seeking a degree generally attend public institutions in larger numbers.[32]

In addition, many students enroll in undergraduate institutions seeking credit, but are not working towards a degree. In this category, students over 40 overwhelmingly attend public two-year schools--79%--and participate on a part-time basis--94%. Enrollment in public four-year institutions is low at 13%, but even smaller percentages of students over 40 enroll in private four- and two-year publications, 7% and 1%, respectively.[33]

Undergraduate Degrees Pursued by Age, 1993



Source: NPSAS: 1993, Data Analysis System, National Center for Education Statistics, U.S. Department of Education

Students over 40 enrolled in degree-granting institutions seeking credentials pursue the following academic programs: 46% are in associate's program, 24% enroll in bachelor's degree programs, 21% participate in certificate or formal award programs, and 9% are working towards other undergraduate programs. In contrast, of those 18 to 24 year old students enrolled in degree programs, 34% pursue associate's degrees, 53% enroll in bachelor's programs, 11% seek a certificate or other formal award, and 3% are attempting to complete some other undergraduate program.[34]

Graduate and Professional Students

Approximately 400,000 of the two million students enrolled in graduate and professional programs are 40 and older.[15] Of all graduate and professional students over the age of 40, 66% are female and 34% are male. Eighty-eight percent are white, 6% are black, 3% are Hispanic, 2% are Asian/Pacific Islander, and 1% are American Indian/Alaskan Native.[16]

In graduate programs, 64% of students 40 and over attend public institutions and 36% attend private institutions. But for professional students age 40 and older, a sizeable majority--79%--attend private institutions, as compared to only 21% at public institutions. Sixty percent of graduate and professional students over 40 are married versus 40% who are not.[17]

Over three-fourths of graduate students over the age of 40 attend part-time. Two-thirds of these students enroll at public institutions. Among full-time students, the difference in choice of institutions is less dramatic; 57% of full-time students over the age of 40 enroll in public institutions, compared to 43% at private institutions. Sixty-three percent of professional students 40 years and older attend full-time, with three-fourths of these students at private institutions. Of the 37% who attend part-time, the overwhelming majority--88%--of 40-plus students are at private institutions.[18]

Professional students over 40 are more likely to attend full-time and be enrolled at private institutions than any other postsecondary students in this age group. In large part this difference is due to variations in program types. Given the nature of study in undergraduate and graduate programs, it is easier for students to attend classes part-time. In the more intensive professional programs, full-time study is preferred, due to program length, cost, and the material being study. In addition, greater enrollment at private institutions for older

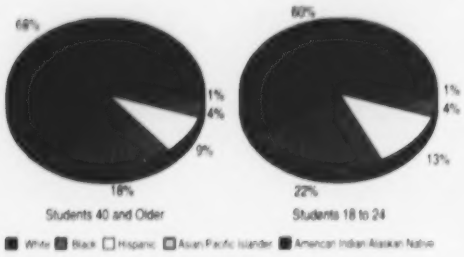
professional students mirrors trends in the general professional student population as a whole.

Proprietary Students

Approximately 1.5 million students enroll in for-profit, proprietary institutions. Adults over 40 account for an estimated 85,000 students.[39] Of the over 40 student population enrolled at proprietary institutions, 59% are female and 41% are male. Higher proportions of minorities over the age of 40 enroll in proprietary institutions; only 68% are white, while 18% are black, 9% are Hispanic, 4% are Asian/Pacific Islander, and 1% are American Indian/Alaskan Native. In addition, 53% are married and 47% are not.

For 18 to 24 year old students enrolled at proprietary institutions, 67% are female and 33% are male. This age cohort is 60% white, 22% black, 13% Hispanic, 4% Asian/Pacific Islander, and less than 1% American Indian/Alaskan Native. The overwhelmingly majority of 18 to 24 year old proprietary students are not married; only 11% are married.

Enrollment in Proprietary Institutions by Race/Ethnicity, 1993



Source: NPSAS: 1993, Data Analysis System, National Center for Education Statistics, U.S. Department of Education.

The attendance status of students age 40 and older at proprietary institutions is nearly the opposite of attendance patterns at undergraduate collegiate institutions. Seventy percent of students over the age of 40 attend full-time, while only 30% attend part-time. The proprietary student population as a whole most frequently attends full-time due to the shorter program length of many proprietary schools: among 18 to 24 year old students, 83% attend full-time. Further, many proprietary institutions do not offer part-time options for students.[40]

Employer-Provided Education and Training

Research on employer-provided education and training indicates that there has been an increase in the number of workers who report needing training in order to qualify for a job. Once hired, employers provide a variety of training to different types of workers. In 1995, 49.6 million employees received formal training, an increase of 5% from 1994.[41]

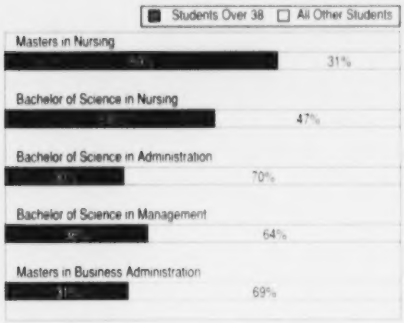
The likelihood of workers receiving skill improvement training is related to their education, occupation, and age. In 1991, college graduates, workers in executive, professional and technical occupations, and those age 35 to 54 were more likely to have received training on their current job than other workers. In fact, 60% of those in executive and professional positions reported receiving training.[42] Furthermore, employment status has an impact on participation in employer-provided training: 33% of full-time workers participate in job skill enhancement programs, compared to 16% of part-time employees.[43]

Innovations

New methods of teaching and learning, spurred on by technology and economic competition, are being used to instruct the record number of students over 40 enrolling in postsecondary education. Though no detailed national data are available to chronicle the enrollment of 40-plus students in these new teaching and learning vehicles, evidence from individual providers suggests that these students are influencing the innovations.

For example, the Education Network of Maine (ENM) provides access to courses, degree programs, training, and teleconferences through a statewide network of voice, video, and data systems. ENM is a separate entity within the

Enrollment in Degree Programs at the University of Phoenix by Age, 1995



Note: Nursing programs have the highest percentage of older students.
Source: Office of Institutional Research, University of Phoenix

University of Maine system, serving an estimated 3,500 students per semester. In 1994, 28% of students participating in ENM's Interactive Television System were over the age of 40.[44]

Another example is the University of Phoenix, a for-profit collegiate institution that uses innovative methods for delivering a wide variety of educational services to working adults. The university includes traditional sites and satellite campuses, and a unique Online division which allows adult students to accommodate work schedules and geographic limitations without sacrificing educational opportunities. Currently, the University of Phoenix enrolls approximately 27,000 working adults, including 1,700 enrolled in the Online division. Between May of 1995 and April 1996, 36% of all entering students--undergraduate and graduate--were 38 years or older. Forty-five percent of Online students were 38 years or older. Of those over 38, 57% were women and 43% were men.[45]

Financing of Education and Training for Students Over 40

The ACT Adult Needs Assessment Survey provides interesting insight into how students over 40 finance their education. Respondents were asked to cite what role certain sources played in financing their education--was it a major, minor, or not a funding source? Personal income scored the highest: 40.5% of students over 40 cited personal income as a major funding source. The next five highest responses listed as major funding sources were: reimbursement by employers--16.3%; personal or family savings--12.4%; other family income--11.7%; educational grants--11.4%; and government

student loans--9.5%. Personal earnings and personal or family savings were the most frequently cited minor sources of funding among the students over 40.[46]

Financial Aid

While students in the ACT survey cited personal resources as playing a large role in funding their education, students in formal higher education can take advantage of student aid programs from a variety of sources. Financial aid comes in the form of grants and loans from the federal government, state governments, postsecondary institutions, and other aid providers, such as private scholarship funds. Furthermore, some businesses and organizations provide funding for their employees' postsecondary education or training. The federal government invests substantial amounts of money in assisting students with access to education beyond high school. In 1995 alone, the federal government provided over $35 billion in student aid funds.

The current financial assistance system, designed in the 1950s for full-time, traditional college age students, frequently excludes students 40 and older due to their non-traditional attendance patterns. For example, many non-traditional undergraduates 40 and older enroll on a less-than-half-time basis due to other time commitments and limited personal resources. However, because they attend less-than-half-time, they are ineligible to receive Pell Grants or federal student loans, which would help to ease their financial burden. In fact, the primary reasons why older undergraduate students receive less aid than younger student are tied directly to their attendance patterns:

- Most 40-plus students are part-timers, and as a whole, part-time students are less likely to receive aid than full-time students;

- Older students enroll most often at community colleges, which have lower costs, limiting their assistance awards;

- Students over 40, financially independent, often married and members of the workforce for a number of years, have higher income levels than many younger students, limiting their eligibility for aid programs; and

- Student budgets used to compile aid packages do not necessarily take into account all of the additional costs--transportation, child care, etc.--that older students experience.

Nonetheless, while their aid awards may be smaller, older students--at both the undergraduate and graduate and professional levels--do benefit from the financial aid available from various sources. Analyses of data from the U.S. Department of Education's 1993 National Postsecondary Student Aid Study (NPSAS) provide information regarding the amount, type, and source of aid that students over 40 receive to participate in education. All data on student financial aid reported in this section of the report are derived from the NPSAS survey, unless otherwise noted.

Undergraduates

Within the 40 and older undergraduate population, just 27% of students receive some form of financial aid. Only 17% of undergraduate students 40 and older receive federal aid, with about half of those (8% of all students over 40) receiving federal loans. By comparison, 46% of all 18 to 24 year olds receive some form of financial aid, with 36% receiving federal aid and 24% receiving federal loans. Five percent of the over 40 adult student population receive institutional assistance, 6% receive state aid, 5% receive employer aid, and 9% receive aid from some other source. Sixteen percent of students 18 to 24 years

old receive institutional aid, 12% receive state aid, 1% receive employer aid, and 7% receive aid from some other source.

Average Aid Amounts

Students over 40 receive an average aid award (from all sources) of $2,845. This is about 40% lower than the average award of $4,627 for students 18 to 24.

The average amount of federal aid awarded to 40-plus students (based on those who are federal aid recipients only) is $3,101, compared to the average for 18 to 24 year olds, which is $3,669. The older cohort receives a slightly smaller average Pell Grant than the traditional group ($1,428 versus $1,557), but is awarded a larger average federal loan package ($3,637 versus $3,451 for all federal loan programs combined).

Variations in federal aid amounts between the two age cohorts can be attributed in large part to their attendance patterns. When average aid amounts for part-time students age 40 and older are compared with part-time students 18 to 24, the differences are reduced. For example, the average federal aid amount for part-time students over 40 is $2,318, compared to $2,741 for part-time 18 to 24 year old students. The difference in average federal aid amounts among full-time students is less: $3,668 for over 40 students, versus $3,864 for 18 to 24 year olds.

State aid to older undergraduate students is limited. The average amount of state aid (all types combined) to 40-plus aid recipients is $1,200. This is not markedly less than the average aid to the traditional 18 to 24 population, however, which is $1,487. Students 40 and older do receive a substantially smaller institutional aid package than students 18 to 24, however. The

Comparisons of Undergraduate Student Aid Awards

Types of Aid	Percentage Receiving Aid		Average Aid Award	
	40 and Older	18 to 24	40 and Older	18 to 24
Any Type	27%	46%	$2,845*	$4,627*
Federal	17%	36%	$3,101	$3,669
State	6%	12%	$1,200	$1,487
Institutional	5%	16%	$1,205	$3,211
Employer	5%	1%	$1,385	$2,232
Other	9%	7%	$1,507	$1,785

* Average aid awards for any type of aid are the average aid packages, with all types combined, that undergraduate students receive.

Source: NPSAS: 1993, Data Analysis System, National Center for Education Statistics, U.S. Department of Education

average award for the 40-plus population is $1,205, and for the younger cohort is $3,211, a significant difference that may explain the large disparity in total average aid awards.

The average amount of employer aid received by students 40 and older is $1,385, while students 18 to 24 receive an average amount of $2,232, perhaps due to propensity of younger students to enroll in higher cost institutions. The average amount of "other" aid to 40-plus students is $1,507, and to traditional 18 to 24 year old students is $1,785.

Graduate and Professional Students

Aid options for graduate and professional students differ somewhat from those for undergraduates. Need-based grants are less common and loans represent the primary type of financing; assistantships are also available on a limited basis to help offset educational costs. Within the 40-plus graduate and professional group, 25% of students receive aid, and their average award (all sources combined) is $4,348. Of all graduate and professional student aid recipients, 39% receive aid, with an average financial aid package of $8,497.

Eight percent of graduate and professional students 40 and older receive federal aid. Their average federal aid amount (all types combined) totals $6,288. Nineteen percent of all students in graduate and professional programs are awarded federal aid, with an average federal aid amount of $8,548. Full-time students have larger average federal aid amounts among both students over 40 and all students at the graduate and professional level: $7,301 and $9,777, respectively, compared to awards of $4,925 and $6,344 for part-time students.

Ten percent of graduate and professional students over 40 and 20% of all students at this level are awarded institutional aid. Average institutional aid awards to 40-plus graduate and

professional students is $3,386, compared to the overall student population's average award of $5,833. Two percent of graduate and professional students over 40 and 3% of all graduate and professional students receive state aid. Their average state award amounts vary substantially: students 40 and older receive almost half the average amount for all graduate and professional students, $1,270 compared to $2,353.

Comparisons of Graduate and Professional Student Aid Awards

Types of Aid	Percentage Receiving Aid		Average Aid Award	
	40 and Older	All Graduate and Professional	40 and Older	All Graduate and Professional
Any Type	25%	39%	$4,348*	$8,497*
Federal	8%	19%	$6,288	$8,548
State	2%	3%	$1,270	$2,353
Institutional	10%	20%	$3,386	$5,833
Employer	7%	8%	$1,383	$2,441
Other	10%	11%	$1,980	$3,474

* Average aid awards for any type of aid are the average aid packages, with all types combined, that graduate and professional students receive.
Source: NPSAS: 1993, Data Analysis System, National Center for Education Statistics, U.S. Department of Education.

Graduate and professional students over the age of 40 receive about the same percentages of aid from employers--7% to 8%. The average amount of employer aid for students over 40 is $1,383, substantially below the average employer aid awarded to all students, $2,441. Graduate and professional students receive slightly larger percentages of aid for other sources. Ten percent of students over 40 and 11% of all students at this level are awarded aid from other sources. The average aid amounts from other sources are $1,980 for students over 40 and $3,474 for others.

Tuition Waivers

In addition to assistance provided through grants and loans, tuition waivers are also available, but are not used as widely. In 29 states, older adults can receive a waiver or reduction of fees when enrolling in a state-supported institution of higher education. An additional nine states provide a fee waiver or discount for older adults only when space is available in a course. All of the states with special tuition arrangements specify that beneficiaries be at least 60, and many require that students be 65.[47]

Many institutions offer tuition waivers for students, but often these are general programs, not targeted specifically to adult learners. Little data exist on the number of institutions that offer either general waivers or specific reductions for older students.

Federal Education and Training Programs

Beyond student aid dollars supplied to students for enrollment in academic programs at formal higher education institutions, the federal government, through the Departments of Labor and Education, provides funds to both employees and employers participating in education and training programs. These programs are usually more skill-oriented or technical in nature than those for workers who are pursuing an academic degree. The programs have different goals and objectives, and accordingly, they target different skills and different members of the workforce. Examples of the main programs, outlined below, feature provisions for older workers, including those over the age of 40.

The Department of Education's Adult Education Act programs provide educational opportunities for adults not currently enrolled in school who lack a high school diploma or the basic skills needed for the workforce. Adult education programs offer assistance in areas such as workplace literacy, high school completion, and limited English proficiency.[48] Federal adult education programs serve approximately 4 million people a year, 16% of whom are 45 and older.[49]

Job Training Partnership Act (JTPA) programs run by the Department of Labor support efforts to prepare adults and youths for entry into the workforce, targeted specifically to economically disadvantaged people. Under Title II-A of JTPA, funds are block granted to state and local governments to provide classroom, basic skills and on-the-job training, job search assistance, counseling, and support services to the

unemployed; 3% of these funds are allocated for training economically disadvantaged adults 55 or older. In 1993, 5,401 people age 55 and older, about 2% of all Title II-A recipients, received assistance.[50]

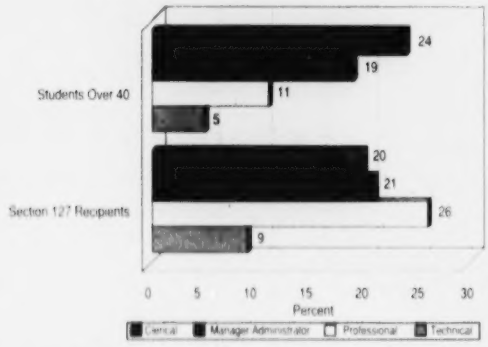
Under the Perkins Vocational and Applied Technology Education Act, the Department of Education is authorized to issue grants to states for academic and occupational skills development programs. Title II of the Act requires each state to allot a portion of its funding for skills development programs targeting single parents, single pregnant women, and displaced homemakers; programs serving juveniles and adults in correctional facilities; and other adult education programs.[51]

Most of the education and training programs funded through the Older Americans Act serve adults 60 and older by offering skills development in areas such as consumer education, continuing education, and financial planning. In addition, the Act authorizes the establishment of an "older American community service employment program" and a "second career training program," both for economically disadvantaged adults 55 and older.[52]

Employee Education Assistance Plans

Beyond their direct investment in employer-provided training that takes place at the job-site, many companies offer employees additional assistance in their pursuit of further education and training. Most often, this assistance takes the form of either an educational reimbursement program--employees are reimbursed for expenses incurred for job-related education or training--or educational assistance programs--employees can exclude income, up to a certain amount, in employer-provided tuition aid. These latter types are most often referred to as Section 127 benefits,which is the section of the Internal Revenue Code that governs whether or

Students Over 40 and Recipients of Employer Assistance by Occupational Field, 1993



Source: NPSAS: 1993, Data Analysis System, National Center for Education Statistics, U.S. Department of Education, and *Who Benefits from Section 127?* National Association of Independent Colleges and Universities, 1995.

not educational expenses are job-related and, therefore, can be excluded from taxable income.

In addition to the limited data on employer aid awards for students over the age of 40 (presented in the preceding section on financial aid), age specific information on corporate spending per employee also is minimal. The primary reason for this lack of data is that employers vary in the ways in which they count the overall investment in their employees' knowledge and skills instruction. Therefore, it is difficult to gather universal data on education and training expenditures by age of employees.

However, reliable information can be presented about the receipt of employer assistance by age through a comparison of enrollment information for students over the age of 40 and overall data on Section 127 assistance to employees. From this comparison, complementary profiles of 40-plus students and Section 127 recipients emerge:

- The majority of students over 40 are enrolled at public institutions--80%--and in larger numbers at two-year institutions in particular--49% of the total; 65% of all Section 127 recipients attend public institutions, with 42% at two-year institutions;

- The largest proportion of students over 40--46%--pursue associate's degrees, followed by bachelor's, 24%, and then certificates, 21%; 33% of employer aid recipients pursue associate's degrees, 23% go for bachelor's, and 13% seek certificates;

- Students over 40 hold positions in the following fields: clerical--24%; manager/administrator--19%; professional--11%; and technical/computer--5%; Section 127 aid is most frequently awarded to workers in the following occupations: clerical/secretarial--20%; manager/administrator--21%; professional--26%; and technical--9%.[53]

Chapter Three
Being There

The postsecondary student experience is a complex undertaking, particularly in formal higher education institutions. Students must organize course schedules, obtain necessary support services, arrange transportation, and balance other aspects of life including work, child care, home, and other responsibilities. This chapter describes the range of issues that the over 40 population must contend with while attending postsecondary education, and differentiates their specific needs from those of other students.

Orientation

What happens to students once they gain access to a postsecondary education is critical to their academic and post-educational success. For the over 40 student population, this process begins as it does for most students: with orientation. Everything from familiarizing students to the facilities to selecting courses requires special attention for older students, who have much different needs than younger students. In fact, several studies of older learners have found that separate registration, advising, and orientation sessions and procedures are beneficial to adults in school.[54] Whereas freshmen orientation for 18 year olds may focus on involving students in social aspects of college and fostering independence and self-reliance, orientation for older students incorporates more specific issues. These include setting short- and long-term goals, building on previous academic experiences, and scheduling classes around work, family life and other commitments.[55] Currently, 30% of all institutions offer orientation programs for adults.[56]

By working closely with older students, even prior to admission, institutions with high adult learner populations have found that the experience for both student and institution is more beneficial. Individuals have a better understanding of their options for possible employment, the content of the curriculum,

and what is expected in terms of performance. Older students with more clearly defined goals and personal counseling are more likely to persevere in achieving them.[57]

Scheduling

For students working while enrolled in higher education, scheduling can be a major challenge. Choosing to attend full-time is rare for students from this age group; they frequently have other time commitments that must be accommodated. Therefore, their choice of classes can be limited, due to availability and times of classes. Postsecondary institutions wishing to serve more older students have responded to these problems by varying their course schedules, and adding early morning, night and weekend classes. Over 40% offer courses that end by 9:00 a.m. and 55% offer classes that begin after 5:00 p.m.[58] In addition, more institutions are offering academic credit for out of class or previous experience and utilizing different delivery methods, such as opening satellite campuses or making better use of evolving technology.[59]

Courses Pursued

Students over 40 pursue a broad range of courses of study at the postsecondary level. These can be grouped as follows: remedial and basic education, continuing education, technical education and training, undergraduate field of study, and graduate and professional programs.

Remedial and Basic Education: Ten percent of students 40 and older who are enrolled in undergraduate higher education are taking at least one remedial course. This is a smaller percentage than for any other age group: 13% of 18 to 24 year olds are in at least one remedial course, as are 14% of 25 to 29 year olds, and 14% of 30 to 39 year olds.[60]

Results from the U.S. Department of Education's 1995 National Household Education Survey (NHES) show that about only 1% of all adults participate in adult basic education and basic skills courses. These programs usually focus on providing adults with help in basic reading, writing, and math skills. Included in this group are preparation courses for high school diplomas or their equivalents. Participants in these courses are more likely to have a high school diploma or less.[61]

Continuing Education: Many adults prefer to pursue postsecondary education activities that are more avocational in nature. Twenty percent of all adults participate in some form of continuing education. Topics are usually related to personal interests or hobbies, such as health, crafts, or sports. Rates of participation increase with educational attainment; those with less than a high school diploma report a 7% rate of participation in continuing education classes, while persons with a bachelor's degree or higher have a 28% rate.[62]

Technical Education and Training: NHES reports that participation in work-related courses is the most frequently cited type of adult education. Only 21%, slightly more than half of all adults who participate in some form of adult education, are taking courses either at work or elsewhere that relate to a job or career, or are taking courses for a license or certification needed for a job. Similar to continuing education classes, participation rates in work-related training increase with level of education. Participation rates range from 4% for non-high school graduates to 38% for those with a bachelor's degree or higher.

One percent of all adults take part in formal training through apprenticeship programs. Two percent of students with some college, an associate's degree, or vocational/technical schooling participate in such programs, while high school graduates and non-graduates each report 1% participation.[63]

Undergraduate Field of Study: Students over the age of 40 focus their study on fields that are similar to those for younger students. According to NPSAS, the top five fields of study for students 40 and older were: Business/Management, Health, Humanities, Education, and Computer Science. This is almost identical to the 18 to 24 student population, whose top five fields of study were: Business/Management, Health, Humanities, Education, and Social/Behavioral Sciences.[64]

Graduate and Professional Programs: At the graduate and professional level, the over 40 age cohort has different academic interests than other students. The top five fields of study for these students are: Education (nearly half of all students over 40 are pursuing a graduate education credential), Business/Management, Humanities, Social/Behavioral Sciences, and Health. In contrast, the top five fields for all graduate and professional students are: Health, Technical/Professional, Business Management, Engineering, and Education.[65]

Participation of Students Over 40 in Student Services Activities, 1994

ACTIVITY	Never	Once	Sometimes	Often
Talked with Faculty about Academics	45%	13%	30%	12%
Attended Career Related Lectures	74%	10%	11%	5%
Had Contact with Faculty Outside of Class	62%	9%	23%	6%
Participated in School Clubs	91%	2%	2%	5%
Studied in Groups with Other Students	58%	6%	21%	15%
Attended Student Assistance Centers	93%	1%	2%	5%
Participated in Intramural Sports	94%	0%	1%	5%

Source: BPS: 1990/1994, Data Analysis System, National Center for Education Statistics, U.S. Department of Education

Student Services

Students require a range of support and other services while enrolled in postsecondary education. Research on services for students over 40 indicates that there are several specific concerns that these students have. Besides counseling and academic advising, 40-plus students cite greater availability of and access to parking, special assistance with financial aid and housing, better preparation of faculty and staff to meet their needs, career-related counseling, and health services.[66]

Interestingly, despite their stated needs for these services, many adult student do not take

advantage of them. Data from the Department of Education's Beginning Postsecondary Students study show limited participation for students over 40 in activities such as utilizing student assistance centers, talking with faculty members about academics, or even having any contact with professors outside of class.[67]

Part of the reason why students over 40 do not take advantage of the services available to them is lack of time. With child care, career, and other responsibilities, many 40-plus students simply don't have time to participate. Further, research on adult student needs indicates that many institutions have not yet mastered the process of making such services readily accessible to adult students. For example, faculty members typically have office hours that are during the normal work day--when many over 40 students are unavailable.

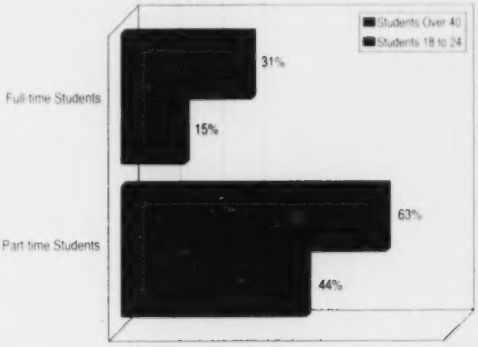
Work

One of the most important issues that students over 40 must contend with is juggling work and academics. According to NPSAS, 57% of undergraduate students over 40 work at least 30 hours per week. This compares to only 25% of students age 18 to 24.

For full-time students, 31% of those over 40 work more than 30 hours per week, while only 15% of those 18 to 24 do so. For part-time students, 63% of 40-plus students work more than 30 hours, compared to a smaller but still substantial 44% of 18 to 24 year olds.

Also of interest is the fact that, of those who work, students over 40 tend to work more hours than their younger counterparts.

Students Who Work At Least 30 Hours Per Week, 1993



Source: NPSAS: 1993, Data Analysis System, National Center for Education Statistics, U.S. Department of Education

The typical undergraduate student over the age of 40 works an average of 38 hours per week, or nearly full-time. Of 18 to 24 year olds who work, the average per week is 26 hours.[68]

Transportation

For adult students who commute, transportation to and from the site of classes is important. Specific needs range from adequate parking, to on-campus shuttle service, to assistance with arranging transportation for child care.

According to NPSAS, the vast majority of students over 40 are commuters, with 98% living off-campus or with parents or relatives.[69] Thus, for the vast majority of over 40 students, transportation is an essential concern.

Family Care

Caring for family members--children and elderly parents in particular--is also a concern for adults returning to the world of learning. Sometimes referred to as the "sandwich generation," middle aged adults, especially women, are often the primary caretakers of both older and younger family members. These expenses can add to the financial burden of paying for education and create additional complications in terms of scheduling and time availability for study.

Data from NPSAS indicate that caring for family members is a significant issue for over 40 students, as almost half of them--46%--have children of their own. The study shows that students over 40 pay an average of $645 per year for day care, baby sitting, and other dependent expenses.[70]

Chapter Four
Moving On

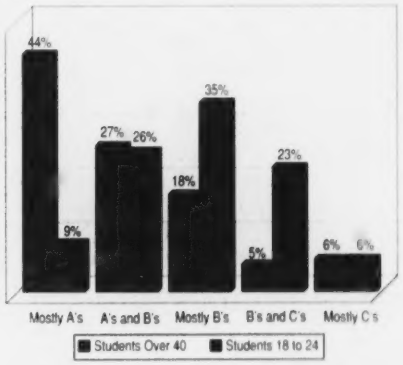
4

As discussed earlier in this report, overcoming some of the hurdles to participation in education and training is a difficult challenge for older students. But students can face just as many obstacles in attempting to complete the goals that they have set for themselves. Whether they endeavor to earn a degree, complete coursework, improve intellectual, occupational or personal skills, or complete some other individual goal, numerous factors can work against students in their quest. For many of these students, their patterns of attendance and participation are major obstacles to success. For example, among students pursuing a degree, part-time attendance significantly decreases the chance of completing a degree or other educational or career goal, a particularly troubling fact for students 40 and older, 79% of which attend part-time. This chapter focuses on what happens to 40-plus students following their completion of postsecondary education.

Achievement and Time to Degree

For all students, regardless of age, information regarding academic achievement and the time it takes to complete a degree is limited, particularly on a national level. But tracking achievement and completion for older students is important. For those students who have had to overcome personal hardships to enter or return to education, the sense of accomplishment is often more important than the level of achievement. One way of measuring such accomplishment is through course grades. Findings from the Beginning Postsecondary Students study show that older students as a group perform at higher levels than their younger classmates. From

Grades Received by Postsecondary Students by Age, 1989-1994



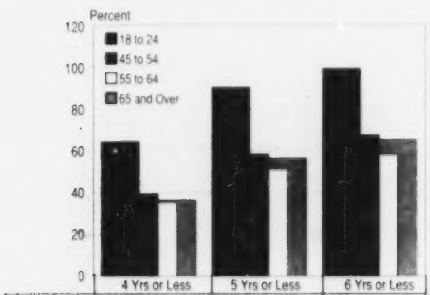
Source: BPS: 1990/1994, Data Analysis System, National Center for Education Statistics, U.S. Department of Education.

1989 through 1994, more students age 40 and older achieved "mostly A's": 44% of 40-plus students reported having received mostly A's. In addition, among students over 40, 27% received "A's and B's," 18% received "mostly B's," 5% received "B's and C's," and 6% received "mostly C's".

In comparison, only 9% of students 18 to 24 received mostly A's. Twenty-six percent of 18 to 24 year old students received A's and B's, 35% received mostly B's, and 23% received B's and C's. The same percentage of students age 18 to 24 received mostly C's--6%.[71]

Time restraints are often the greatest obstacles to retention and degree completion for students over 40. The competing demands for time--work, family, etc.--disrupt older students' ability to focus on their studies, and proceed towards their goals. Census data show this effect: more students age 18 to 24 completed their degrees in six years or less than did older students. Among 18 to 24 year olds with bachelor's degrees, 64% had completed their degree in four years or less, 90% completed in five years or less, and almost 99% had finished in six years or less. In comparison, only 39% of 45 to 54 year olds with bachelor's degrees had completed in four years, 58% had completed in five years, and 67% completed in six years. Among even older students, fewer students had completed their bachelor's degree in six years--58% of 55 to 64 year olds, and 65% of those 65 and older.[72]

Time to Degree Completion by Age, 1993



	4 Yrs or Less	5 Yrs or Less	6 Yrs or Less
18 to 24	64	90	99
45 to 54	39	58	67
55 to 64	35	51	58
65 and Over	36	56	65

Source: *Educational Attainment in the United States March 1995*, U.S. Bureau of the Census, 1995

Degrees Awarded

Among students 40 and older, undergraduate (AA and BA) degree attainment is most

frequent in the fields of Nursing, Social Work/Public Administration, Computer Science, Accounting, Visual and Performing Arts, and Home Economics. For graduate and professional students 40 and older, degrees are awarded most often in the fields of Education, Nursing, Social Work/Public Administration, Home Economics, Secretarial Training/ Bookkeeping, Communications, Liberal Arts, and Library Science.[73]

Career Counseling and Placement

Guidance in negotiating entry or reentry to the professional world, or in pursuing a career change, is a common need for students. However, adult students require career counseling and placement services appropriate to their age and experience. Seventy percent of students over 40 reported not using job placement services, and of those who did use an institution's job placement services, only 7% were satisfied, while 6% were dissatisfied. Among 18 to 24 year olds, the use of and satisfaction with job placement services was higher: 29% used institutional placement services and were satisfied, 9% who used the services were not satisfied, and 57% did not use placement services.[74]

Benefits of Higher Education

In addition to the marketable job skills that those 40 and older acquire through higher education, there are many other benefits that they accrue for society as a whole and for themselves personally. Unfortunately, limited data is available on the specific benefits of education and training that takes place at the age of 40 and after. The following discussion provides an overview of benefits associated with participation in education and training in general.

Increased personal earnings are one of the most tangible and desirable results of postsecondary education and training. In general, the more education an individual has, the higher his or her personal income. For adults age 45 to 54 who stopped their education with a high school diploma, the mean monthly income is $1,711. Their peers who participated in college but did not receive a degree have a mean monthly income of $2,484. With a bachelor's degree, the monthly figure rises to $3,345, with a master's degree to $3,983, and with a professional degree to $6,606.[75] In addition, wages grow faster for those workers who have received training: employer training accounts for two-thirds of the earnings gained over a working career, in comparison to changing jobs, which accounts for only one-sixth of the growth in wages.[76]

People with higher education are less likely to be unemployed and/or rely on public health and social services. The unemployment rate in 1990 for adults 25 and older was 3% for recipients of a bachelor's degree or higher, almost 5% for associate's degree recipients, close to 7% for those with just a high school diploma, and over 11% among those with less than a high school diploma.[77] Among people without a high school diploma, almost 16% received Medicaid in 1992, compared to 5% of high school graduates and less than 2% of adults with one or more year of college.[78] Public housing assistance went to 7% of adults without a high school diploma, but only 3% of high school graduates and less than 2% of those with one or more years of college.[79]

Adults with postsecondary education are more frequent contributors to social institutions and processes. In the 1990 elections, for example, 45% of all eligible and registered voters voted. Among the registered voters with one to three years of high school, 31% voted. High school graduates who were registered voters voted at a rate of 42%, while college

graduates had a voting rate of 59%. Among registered voters with five years or more of college, the participation rate was 68%, more than twice that of high school drop-outs.[80] Additionally, citizens with postsecondary education participate at higher rates in community service than those with less education: those with graduate/professional education participate at a rate more than twice that of high school graduates--23% compared to 10%--and more than four times that of high school drop-outs--5%. Rates of participation in school service groups, such as PTA, also increase dramatically, as educational attainment increases.[81]

Furthermore, if a child's parents have attended college, it is more likely that the child also will pursue postsecondary studies. In a survey of college freshmen, approximately 52% had a mother with some college, a college degree, or above; 32% had a mother whose highest education level was a high school diploma. Among the freshmen's fathers, 57% had some college, a college degree, or above, while less than 27% had only a high school diploma.[82]

Chapter Five
Conclusion

Americans over 40 represent the largest age cohort in U.S. history. This group, already having a major impact on the economic and social vitality of the nation, is beginning to have a burgeoning impact on how postsecondary education takes place, by whom, and for what purposes.

No matter which doorway students over 40 take to postsecondary education and training, it is clear that they are at the forefront of a learning revolution. For individuals, the postsecondary experience is rapidly changing, as providers of education and training attempt to respond to the expanding diversity of students and the challenges that they bring. For the providers, change is being driven by evolving consumer demands, shifting employer needs, and an increasingly competitive and fluctuating marketplace.

As the research and analysis in this report illustrates, the long-term impacts that students over 40 might have on the system of postsecondary education—and on American society—are only now beginning to appear. With the new century approaching, students over 40 could have several significant effects:

The demographic "wave" of students over 40 could overwhelm the current infrastructure of traditional higher education institutions, especially when combined with the baby boom "echo" of students who will begin enrolling around the year 2000.

The over 40 group could significantly impact the nation's entire approach to postsecondary education. While much has been written about the possible effects of the baby boom echo, little has been focused on the impact of the echo generation and their parents simultaneously participating in postsecondary education. The over 40 cohort could place extraordinary demands on colleges and universities, generating an even greater need to increase faculty and staff, build new and

different facilities to accommodate more students, and enhance student services.

Barriers to participating in postsecondary education will be reduced as employers play a larger role in the education and training of all Americans. Unlike the generation of workers that came before them, the over 40 population has gained greater access to training through their workplaces and other providers. Since the 1970s, the number of corporate universities has grown from 400 to over 1,000.[53] The increased convenience and flexibility that they offer has transformed the postsecondary education market. As a result, the historical concentration of postsecondary education and training in traditional colleges and universities will likely continue to be augmented by new providers of postsecondary education and training.

Students over 40 will help to transform how postsecondary education is delivered.
Despite the over 40 generation's lower comfort level with technology and computers, they have been major consumers of new teaching and learning tools. From the Internet, to "distance learning," to self-paced learning on computers, the process of postsecondary instruction continues to change rapidly. Students over 40, who generally do not enroll in residential programs or attend a traditional college or university on a full-time basis, are at the forefront of this trend.

Students over 40 will have a major impact on how postsecondary education is financed.
The changes now occurring in postsecondary financing—escalating tuitions, exploding student loan borrowing, etc.—are only the beginning. As students over 40 grow as a proportion of the postsecondary population, their specific needs and circumstances will affect the entire financing system. Institutions will be compelled to adjust how they allocate

resources due to the unique demands that adults over 40 place on student services. They will also need to take the part-time, irregular attendance patterns of 40-plus students—and their higher family care and transportation costs—into account when awarding student aid. Furthermore, students over 40 will have to modify their own spending habits, particularly since many will face the prospect of simultaneously footing the bill for their children's education.

Americans over the age of 40 will be critical to the economic productivity of the nation and its competitiveness on a global scale.

Numerous studies on worker productivity have pointed out that some of the greatest contributions workers make to the U.S. economy and to their specific field of employment occur after the age of 40.[84] Since this population is the largest age cohort in history, it is likely to have the greatest economic and social impact on the nation.

Lifelong learning will increasingly become a reality for Americans.

The expanding availability of postsecondary education to students over 40 has the potential to influence how much a person can learn over the course of his or her productive work life. As the need to upgrade skills continuously becomes a requirement for employers and employees, the notion of lifelong learning will become commonplace. This will significantly affect how people think about and approach work, including decisions concerning career changes, retirement, and a host of other issues.

The increased participation of Americans over the age of 40 in postsecondary education and training will contribute to the nation's social stability and well-being.

As more citizens age 40 and older participate in postsecondary education and training, the benefits they reap as individuals will

pay off for society as a whole. Research has shown that persons who have attended postsecondary education earn higher wages and have lower rates of unemployment and welfare participation. They also give back to society by performing more community service, voting at higher rates than others, and contributing more to the nation's tax base.

•••

Students over 40 are now beginning to emerge as a major influence on postsecondary education and training. Though still proportionally smaller than other age groups on campuses and in classrooms, the rapid growth of this group has placed it at the forefront of change and progress. The current experiences of students over 40 provide a vision for the future of education and training for all citizens, and in so doing offer a window to the future of our nations's prosperity.

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